

REMARKS

This Amendment is submitted in response to the final Office Action dated March 31, 2008. Claims 1-4, 6, 8, 10-14, 16, 18, 20-23, 26, 28 and 30 have been amended herein. Claims 5, 7, 15, 17, 25, 27 have been canceled. Claims 1-4, 6, 8-14, 16, 18-24, 26, and 28-30 are currently pending. No new matter has been added to the claims. Support for the amended substantive language incorporated in independent claims 1, 11, and 21 can be found in paragraph [0031] of Applicant's published application. Moreover, support for the amended language in dependent claims 6, 16, and 26 can be found in paragraph [0047] of Applicant's published application. The remaining amendments are minor in nature and are intended to correct antecedent basis and grammatical oversights.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

Independent Claims 1, 11, and 21

The final Office Action rejects independent claims 1, 11, and 21 under 103(a) as unpatentable over U.S. Patent App. Pub. No. 2004/007854 to *Cirne et al.* ("*Cirne*") in view of U.S. Patent No. 7,089,460 to *Fu* ("*Fu*").

Claims 1, 11, and 21 as amended are patentable over *Cirne* in view of *Fu*. Claims 1, 11, and 21 recite, in part:

“...generating a statistics report including the generated stack walkback for the at least one identified software object, wherein the statistics report is generated **before** the occurrence of an out-of-memory error and in a format that indicates **a location of an executing logic at a time of the out-of-memory error....**” (*boldfaced emphasis added*)

However, neither *Cirne*, *Fu*, nor their combination teach or suggest the idea of (a) generating a statistics report before the occurrence of an out-of-memory error, and (b) in a format that indicates a location of an executing logic at a time of the out-of-memory error.

Regarding point (a) above, *Cirne* does not disclose the recited limitations of claim 1 (and claims 11 and 21). While *Cirne* describes a system that reports information relating to potential memory leak sources and stores such reported information in a log file (assuming that the log file

in *Cirne* were equivalent to Applicant's statistics report, it is unclear whether *Cirne* teaches or suggests that the log file is actually generated. Moreover, *Cirne* does not teach the generation of its log file before the occurrence of an out-of-memory error.

Regarding point (b) above, *Cirne* does not teach, hint, or suggest that its log file indicates a location of an executing logic at a time of an out-of-memory error, as Applicant has claimed in amended claims 1, 11, and 21. *Cirne*, at best, teaches that its log file tracks growth patterns of groups of stored items that appear to be growing in size. According to ¶ [0053] of *Cirne*, the entry in the created log file only includes the following information:

"current timestamp when written to the log, an identification (ID) for the collection, the class of the collection, the allocation time of the collection allocation stack trace for the collection, current size of the collection and ten sample elements in the collection (represented by class name, followed by the toString() representation capped at 20 characters)."

However, *Cirne* fails to teach suggest or suggest a mechanism to account for situations that occur at the time of an out-of-memory error.

Fu also fails to cure for the deficiencies of *Cirne* when taken alone or in combination therewith. While *Fu* teaches a system and method of detecting computer memory leaks, *Fu* does not teach, hint, or suggest the generation of a statistics report that is generated before the occurrence of an out-of-memory error. Instead, *Fu* focuses on the steps for determining whether a memory leak exists (see *Fu*, Abstract).

In addition *Fu* does not teach, hint, or suggest the existence of a statistics report, as recited in claims 1, 11, and 21, and described in Applicant's specification. Moreover, even if one could assume that a statistics report were taught by *Fu*, which Applicant submits it does not, *Fu* does not show a statistics report that indicates a location of an executing logic at a time of an out-of-memory error.

Because the combination of *Cirne* and *Fu* fails to teach or suggest each limitation of claim 1, Applicant asserts that claim 1 (as well as claims 11 and 21) is patentable over the cited art under 35 U.S.C. 103(a). Claims 2-4, 6, 8-10, 12-14, 16, 18-20, 22-24, 26, and 28-30 each ultimately depend from independent claim 1, 11, or 21, and therefore are patentable for at least the same reasons in addition to the distinguishing limitations they recite.

Dependent claims 6, 16, and 26

Applicant has amended claims 6, 16, and 26 to recite in part:

“wherein said statistics report includes a notation for one or more software object classes that have instance counts that have grown by a factor of ten or more since a time period from when said software object classes are first reported within said statistics report.” (underlined emphasis added)

Cirne does not disclose that its log file (assuming a log file were equivalent to Applicant’s statistics report, which Applicant submits it does not) includes a notation for at least one software object class that has an instance count that has grown by a factor of ten or more since a time period from when the software object classes are first reported within the statistics report, as recited in amended claims 6, 16, and 26. Moreover, *Fu* also fails to teach or suggest the limitations of amended claims 6, 16, and 26. At best, *Fu* discloses a particular type of threshold for determining whether a memory leak exists. However, such a threshold in *Fu* is measured differently than described by Applicant (see *Fu*, Abstract). According to *Fu*, if less than four memory usage data minima points are present after taking the second derivative of the minima point data, a memory leak exists (see *Fu*, FIG. 6). Since *Cirne* and *Fu* independently fail to teach the above limitation recited in claims 6, 16, 26, they cannot be properly combined for purposes of §103(a) to teach or suggest Applicant’s claimed invention.

CONCLUSION

Since nothing in *Cirne*, *Fu*, or their combination teaches or suggests the foregoing newly added limitations in amended claims 1, 11, and 21, it follows that the grounds for rejecting claims 1-30 and all the pending claims depending therefrom have been overcome. Based on the above amendments and these remarks, reconsideration of pending claims 1-4, 6, 8-14, 16, 18-24, 26, and 28-30 is respectfully requested.

The Examiner's prompt attention to this matter is greatly appreciated. Should further questions remain, Applicant invites the Examiner to contact the undersigned attorney of record at (512) 343-6116 if such would further or expedite the prosecution of the present Application.

Enclosed is a PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. § 1.136 for extending the time to respond up to and including today, July 31, 2008.

The Commissioner is authorized to charge any underpayment or credit any overpayment to IBM CORPORATION Deposit Account No. **09-0447** for any matter (except for extensions of time which shall be charged to DILLON & YUDELL Deposit Account **50-3083**) in connection with this response.

Respectfully submitted,



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